

A new *Dichrorampha* species from Latvia (Tortricidae : Olethreutinae)

Ivars ŠULCS* & Sakari KERPPOLA**

* Stirnu 18, LV-1082 Riga, Latvia

** Hiihtomäentie 44 A 6, FIN-00800 Helsinki, Finland

Summary

Dichrorampha teichiana sp. n. is described from material collected in the eastern part of Latvia at the bank of the River Daugava. It resembles *D. plumbana* (Scopoli, 1763) externally but *D. sedatana* (Busck, 1906) in genitalia. The species occurs flying around *Achillea salicifolia* Besser (= *A. cartilaginea* Ledeb. ex Reichenb., *A. ptarmica* subsp. *cartilaginea* (Ledeb. ex Reichenb.)) on wet meadows. The species is collected only in Latvia.

Zusammenfassung

Dichrorampha teichiana sp. n. wurde aus gesammeltem Material im östlichen Teil Lettlands am Ufer der Flusses Daugava beschrieben. Die neue Art ist äusserlich dem *D. plumbana* (Scopoli, 1763) ähnlich, aber genitalisch ist sie *D. sedatana* (Busck, 1906) nahe. Die neue Art wurde um *Achillea salicifolia* Besser (= *A. cartilaginea* Ledeb. ex Reichenb., *A. ptarmica* subsp. *cartilaginea* (Ledeb. ex Reichenb.)) fliegend beobachtet. Die Art ist bis jetzt nur von Lettland bekannt.

Résumé

Dichrorampha teichiana sp. n. est décrit d'après du matériel récolté dans la partie orientale de la Lettonie sur la rive de la rivière de la Daugava. Cette espèce ressemble à *D. plumbana* (Scopoli, 1763) d'après l'aspect extérieur, mais plutôt à *D. sedatana* (Busck, 1906) d'après les genitalia. L'espèce est inféodée à *Achillea salicifolia* Besser (= *A. cartilaginea* Ledeb. ex Reichenb., *A. ptarmica* subsp. *cartilaginea* (Ledeb. ex Reichenb.)) dans des prés humides. Jusqu'à présent, l'espèce n'est connue que de Lettonie.

Introduction

The valley of the River Daugava is rich in fauna and flora with many species of eastern European origin. During one of the excursions to the valley near Daugavpils city, the first author discovered a *Dichrorampha* species unknown to him. When checking its genitalia according to Kuznetsov (1978), the species corresponded to *D. sedatana* (Busck, 1906), though otherwise externally it resembled *D. plumbana* (Scopoli, 1763). When comparing the unknown species with some genuine *D. sedatana* specimens from Denmark and Sweden some remarkable external and genitalic differences were found. The taxon is described here as a new species.

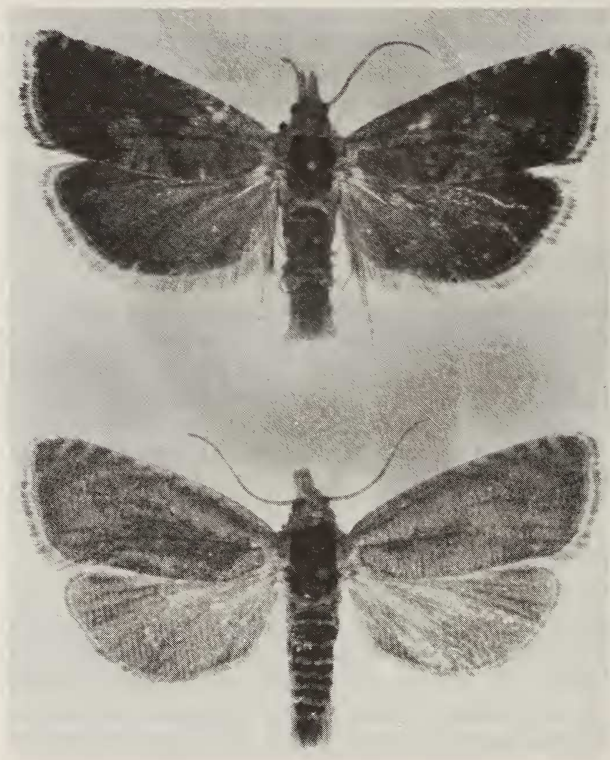


Fig. 1. From above :

- (1) *Dichrorampha teichiana* sp. n. ♂, Latvia, Daugavpils, 7.VI.1992, I. Šulcs leg.
- (2) *Dichrorampha sedatana* (Busck, 1906) ♂, Suecia, Sk. Ålabodarna UTM 33V UC 6101, 20.V.1984, I. Svensson leg.

Dichrorampha teichiana sp. n.

HOLOTYPE ♂, Latvia, Daugavpils, 1.VI.1990, I. Šulcs leg. in the collection of I. Šulcs.

PARATYPES (38 ♂♂, 3 ♀♀) : Latvia, Daugavpils, 1.VI.1990, 2 ♂♂, gen. slide 352X/B. Å. Bengtsson, I. Šulcs leg. ; Latvia, Daugavpils, 9.VI.1991, 2 ♂♂, I. Šulcs leg. ; Latvia, Daugavpils, 7.VI.1992, 15 ♂♂, 1 ♀ gen. slide 576X/B. Å. Bengtsson, I. Šulcs leg. ; Latvia, Piedruja, 14.VI.1994, 5 ♂♂, N. Savenkov leg. ; Latvia, Naujene, 15.VI.1994, 14 ♂♂, 2 ♀♀, N. Savenkov leg. The holotype and paratypes have been deposited in the collection of the Latvian Museum of Natural History in Riga (Latvijas Dabas muzejs).

DESCRIPTION. *Male*. Forewing length 5.5-6.5 mm. — Palpi and face brownish grey. Thorax and base of tegulae brownish grey. Ground-colour of forewing dark brown with sprinkling of black scales in the middle and subapical areas. Scattered yellowish irroration extending from base to apical area of wing. Scales, causing the irroration, dichromatic, basally dark brown and apically yellowish. Five pale yellow marks of costal strigulae in apical half of wing. Plumbeous lines very faint. Ocellus weak with three black streaks or dots. Mediodorsal blotch diffuse and weakly strigulate, constricted at median fold. Hindwing dark brown without yellow irroration, looking darker than forewing. Cilia line double, inner one stronger than outer one. Abdomen dark brown with brownish grey scales. Anal tuft brownish grey.

Male genitalia. Ventral edge of valva with prominent excision. Apex of sacculus forming almost right angle. Margins of valva tapering to cucullus. Ventral edge of cucullus rounded. Outline of basal pit of valva forming right angle with costal margin of valva. Aedeagus straight without any denticulation.

Female. Forewing length 7.5 mm. — Wing pattern as in male.

Female genitalia. Lamella postvaginalis large. Ostium and antrum weakly sclerotized. Signum comparatively small.

DIAGNOSIS. In general, all the species belonging to the genus *Dichrorampha* are quite similar and difficult to identify externally and can be distinguished primarily by checking genitalia (Bradley & Tremewan, 1970 ; Bradley, Tremewan & Smith, 1979 ; Danilevsky & Kuznetsov, 1968 ; Hanneman, 1961 ; Sauter, 1960).

The new species resembles externally and in genitalia construction either *D. sedatana* or *D. plumbana* (fig. 1). *D. sedatana* has a uniform

yellowish olive-green irroration covering the whole forewing; *D. plumbana* lacks the yellowish irroration in the basal part but this appears in the middle and apical parts of the wings. *D. teichiana* shows a scattered yellowish irroration of forewing. The new species is closer to *D. plumbana* in colour but, in genitalia, to *D. sedatana*.

The following genitalia characters distinguish *D. teichiana* from *D. sedatana* :

- In the male genitalia (fig. 2), the ventral edge of cucullus of the valva is more rounded and the ventral margin of valva is more abrupt and deeper emarginate as in *D. sedatana*
- the aedeagus lacks the dorsal single or double denticulation present in *D. sedatana*
- the outline of the basal part of valva forms an acute angle instead of a right angle in *D. sedatana*

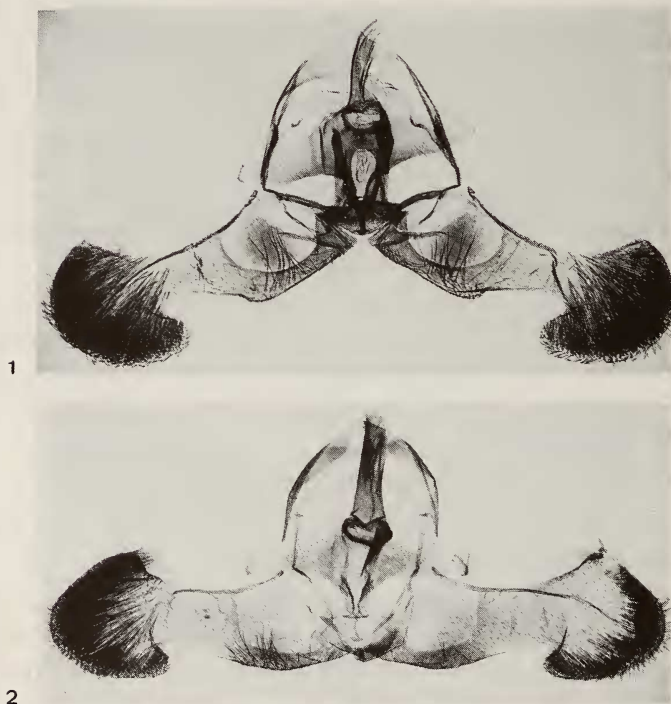


Fig. 2. From above :

(1) Male genitalia of *Dichrorampha teichiana* sp. n., paratype, gen. slide BÅB 352X, Latvia, Daugavpils, I.VI.1990, I. Šulcs leg.

(2) Male genitalia of *Dichrorampha sedatana* (Busck, 1906), gen. slide BÅB 350X, Latvia, Virga, 20.VI.1987, I. Šulcs leg.

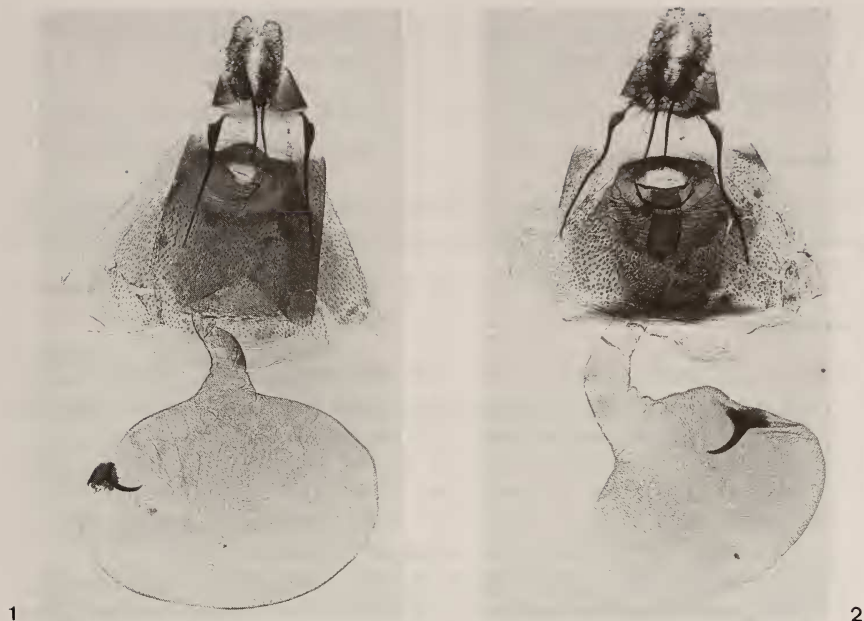


Fig. 3. From left :

(1) Female genitalia of *Dichrorampha teichiana* sp. n., paratype, gen. slide BÅB 576X, Latvia, Daugavpils, 7.VI.1992, I. Šulcs leg.

(2) Female genitalia of *Dichrorampha sedatana* (Busck, 1906), gen. slide BÅB 596X, Suecia, Sk. Ålabodarna UTM 33V UC 6101, 20.V.1984, I. Svensson leg.

— in the female genitalia (fig. 3), the structure of antrum is similar to *D. sedatana* but, in *D. teichiana*, the sclerotization is weaker — the signum of *D. teichiana* is smaller.

BIOLOGY. The type material has been collected in the dusk on wet river bank meadows. The immature stages of *D. teichiana* are still unknown but the moths were flying around *Achillea salicifolia* Besser (= *A. c. rtilaginea* Ledeb. ex Reichenb., *A. ptarmica* subsp. *cartilaginea* (Ledeb. ex Reichenb.)), which could be the larval host-plant.

DISTRIBUTION. Latvia (Daugavpils, Naujene, Piedruja). *D. teichiana* is now known only from Latvia. In comparison, *D. sedatana* has a wide distribution in northern and central Europe. The more eastern distribution of *D. teichiana* could be explained apparently by *A. salicifolia*, the probable larval host-plant of this species, occurring only in eastern Europe. In the biotope of *D. teichiana*, I have also collected another very interesting species with an eastern distribution, *D. uralensis* Danilevsky, 1948.

ETYMOLOGY. The species is named after the late lepidopterologist Carl August Teich (1838-1908), well known for his research of the Lepidoptera of Latvia.

Acknowledgements

We thank Bengt Å. Bengtsson (Löttorp, Sweden) for photographing the genitalia, Knud Larsen (Søborg, Denmark) and N. Savenkov (Riga, Latvia) for comments on the manuscript.

References

- BRADLEY, J.D. & TREMEWAN, W.G., 1970. Taxonomic notes of certain species in the genus *Dichrorampha* Guenée, 1845 (Lep. Tortricidae), including some changes in nomenclature. *Entomologist's Gaz.* 21 (1) : 3-12.
- BRADLEY, J.D., TREMEWAN, W.G. & SMITH, A., 1979. British Tortricoid Moths. Tortricidae : Olethreutinae. The Ray Society, London, 336 pp.
- DANILEVSKY, A.S. & KUZNETSOV, V.I., 1968. Tortricidae, Laspeyresiini (in Russian). Fauna SSSR 5(1). Leningrad, 635 pp.
- HANNEMAN, H.J., 1961. Die Tierwelt Deutschlands. Teil 48. Kleinschmetterlinge oder Microlepidoptera. I. Die Wickler (s. str.) (Tortricidae). Jena, 233 pp.
- KUZNETSOV, V.I., 1978. Family Tortricidae, Laspeyresiini (Olethreutidae, Cochyliidae) — Tortricoid Moths. In: MEDVEDEV, G.S (Ed.) : Key to the insects of European part of the USSR 4(1), Leningrad, 710 pp. (English translation 1989).
- SAUTER, W., 1960. Über einige von J. C. de la Harpe, J. Müller-Rutz und P. Weber aus der Schweiz beschriebene Kleinschmetterlinge (Lep.). *Mitt. schweiz. ent. Ges.* 33 : 264-274.